## Listing of Claims:

## 1-57: (Canceled)

58. (Previously Presented) A method of prophylaxis of Alzheimer's disease in a mammalian subject, comprising: administering to the subject a dosage of synuclein-NAC effective to produce an immune response comprising anti-synuclein antibodies and an adjuvant that augments the immune response to the synuclein, wherein said administering further comprises administering an immunogenic A $\beta$  fragment, thereby effecting prophylaxis of Alzheimer's disease.

## 59. (Canceled)

- 60. (Previously Presented) The method of claim 58, wherein said adjuvant is selected from the group consisting of STIMULON QS-21, 3 De-O-acylated-monophosphoryl lipid A, and alum,
- 61. (Previously Presented) The method of claim 58, wherein said immune response is characterized by a serum titer of the anti-synuclein antibodies of at least 1:1000 with respect to synuclein.
- 62. (Previously Presented) The method of claim 61, wherein said serum titer of the anti-synuclein antibodies is at least 1:5000 with respect to synuclein.
- 63. (Previously Presented) The method of claim 58, wherein said immune response is characterized by a serum titer of anti-synuclein antibodies corresponding to greater than about four times higher than a serum titer of anti-synuclein antibodies measured in a pretreatment control serum sample.
- 64. (Previously Presented) The method of claim 63, wherein said serum titer of the antibodies is measured at a serum dilution of about 1:100.

- 65. (Previously Presented) A method of treating Alzheimer's disease in a mammalian subject, comprising administering to the subject a dosage of synuclein-NAC effective to produce an immune response comprising anti-synuclein antibodies and an adjuvant that augments the immune response to the synuclein, wherein said administering further comprises administering an immunogenic  $A\beta$  fragment, and thereby treating the disease.
- 66. (Previously Presented) The method of claim 65, wherein said synuclein-NAC is linked to a carrier molecule to form a conjugate.
- 67. (Previously Presented) The method of claim 65, wherein said adjuvant is selected from the group consisting of STIMULON QS-21, 3 De-O-acylated-monophosphoryl lipid, and alum.
- 68. (Previously Presented) The method of claim 65, wherein said immune response is characterized by a serum titer of the anti-synuclein antibodies of at least 1:1000 with respect to synuclein.
- 69. (Previously Presented) The method of claim 68, wherein said serum titer of the anti-synuclein antibodies is at least 1:5000 with respect to synuclein.
- 70. (Previously Presented) The method of claim 65, wherein said immune response is characterized by a serum titer of anti-synuclein antibodies corresponding to greater than about four times higher than a serum titer of anti-synuclein antibodies of measured in a pretreatment control serum sample.
- 71. (Previously Presented) The method of claim 70, wherein said serum titer of the anti-synuclein antibodies is measured at a serum dilution of about 1:100,
- 72. (Previously Presented) The method of claim 58, wherein said Aβ fragment is Aβ1-3.
- 73. (Previously Presented) The method of claim 58, wherein said Aβ fragment is Aβ1-4.

- 74. (Previously Presented) The method of claim 58, wherein said AB fragment is A\(\beta\)1-5.
- 75. (Previously Presented) The method of claim 58, wherein said Aß fragment is AB1-6.
  - 76. (Canceled)
- 77. (Previously Presented) The method of claim 58, wherein said AB fragment is A\beta3-7.
- 78. (Previously Presented) The method of claim 58, wherein said AB fragment is AB1-10.
- 79. (Previously Presented) The method of claim 58, wherein said AB fragment is A\u00e31-12.
- 80. (Previously Presented) The method of claim 58, wherein said AB fragment is  $A\beta 13-28$ .
- 81. (Previously Presented) The method of claim 58, wherein said AB fragment is  $A\beta 25-35$ .
- 82. (Previously Presented) The method of claim 58, wherein said AB fragment is  $A\beta 33-42$ .
- 83. (Previously Presented) The method of claim 58, wherein said Aß fragment is linked to a carrier molecule to form a conjugate.
- 84. (Previously Presented) The method of claim 72, wherein said AB fragment is linked to a carrier molecule to form a conjugate.

- 85. (Previously Presented) The method of claim 73, wherein said Aβ fragment is linked to a carrier molecule to form a conjugate.
- 86. (Previously Presented) The method of claim 74, wherein said Aβ fragment is linked to a carrier molecule to form a conjugate.
- 87. (Previously Presented) The method of claim 75, wherein said Aβ fragment is linked to a carrier molecule to form a conjugate.
  - 88. (Canceled)
- 89. (Previously Presented) The method of claim 77, wherein said Aβ fragment is linked to a carrier molecule to form a conjugate.
- 90. (Previously Presented) The method of claim 78, wherein said Aβ fragment is linked to a carrier molecule to form a conjugate.
- 91. (Previously Presented) The method of claim 79, wherein said Aß fragment is linked to a carrier molecule to form a conjugate.
- 92. (Previously Presented) The method of claim 80, wherein said Aβ fragment is linked to a carrier molecule to form a conjugate.
- 93. (Previously Presented) The method of claim 81, wherein said Aβ fragment is linked to a carrier molecule to form a conjugate.
- 94. (Previously Presented) The method of claim 82, wherein said Aβ fragment is linked to a carrier molecule to form a conjugate.
- 95. (Previously Presented) The method of claim 65, wherein said Aβ fragment is Aβ1-3.

- 96. (Previously Presented) The method of claim 65, wherein said Aβ fragment is Aβ1-4.
- 97. (Previously Presented) The method of claim 65, wherein said  $A\beta$  fragment is  $A\beta1-5$ .
- 98. (Previously Presented) The method of claim 65, wherein said  $A\beta$  fragment is  $A\beta$ 1-6.
  - 99. (Canceled)
- 100. (Previously Presented) The method of claim 65, wherein said  $A\beta$  fragment is  $A\beta$ 3-7.
- 101. (Previously Presented) The method of claim 65, wherein said  $A\beta$  fragment is  $A\beta$ 1-10.
- 102. (Previously Presented) The method of claim 65, wherein said Aβ fragment is Aβ1-12.
- 103. (Previously Presented) The method of claim 65, wherein said Aβ fragment is Aβ13-28.
- 104. (Previously Presented) The method of claim 65, wherein said  $A\beta$  fragment is  $A\beta25-35$ .
- 105. (Previously Presented) The method of claim 65, wherein said  $A\beta$  fragment is  $A\beta 33-42$ .
- 106. (Previously Presented) The method of claim 65, wherein said Aß fragment is linked to a carrier to form a conjugate.

MAY.24.2004

- 107. (Previously Presented) The method of claim 95, wherein said Aβ fragment is linked to a carrier to form a conjugate.
- 108. (Previously Presented) The method of claim 96, wherein said Aβ fragment is linked to a carrier to form a conjugate.
- 109. (Previously Presented) The method of claim 97, wherein said Aβ fragment is linked to a carrier to form a conjugate.
- 110. (Previously Presented) The method of claim 98, wherein said Aβ fragment is linked to a carrier to form a conjugate.
  - 111. (Canceled)
- 112. (Previously Presented) The method of claim 100, wherein said  $A\beta$  fragment is linked to a carrier to form a conjugate.
- 113. (Previously Presented) The method of claim 101, wherein said Aβ fragment is linked to a carrier to form a conjugate.
- 114. (Previously Presented) The method of claim 102, wherein said Aβ fragment is linked to a carrier to form a conjugate.
- 115. (Previously Presented) The method of claim 103, wherein said Aβ fragment is linked to a carrier to form a conjugate.
- 116. (Previously Presented) The method of claim 104, wherein said Aβ fragment is linked to a carrier to form a conjugate.
- 117. (Previously Presented) The method of claim 105, wherein said Aß fragment is linked to a carrier to form a conjugate.
- 118. (Previously Presented) The method of claim 58, wherein the subject has a known genetic risk of Alzheimer's disease.

MAY.24.2004

3:04PM

119. (Previously Presented) The method of claim 65, wherein the subject has a known genetic risk of Alzheimer's disease.